ABSTRACT

Disclosed herein is an apparatus and method for retrieving face images using combined component descriptors. The apparatus of the present invention includes an image division unit for dividing an input image into facial components, a first Linear Discriminant Analysis transformation unit for LDA transforming the divided facial components into component descriptors of the facial components, a vector synthesis unit for synthesizing the transformed component descriptors into a single vector, a second Generalized Discriminant Analysis transformation unit for GDA transforming the single vector into a single face descriptor, and a similarity determination unit. The similarity determination unit determines similarities between an input query face image and face images stored in a face image database by comparing a face descriptor of the input query face image with face descriptors of the face images stored in the face image database.